AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Currently Amended) A system for semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

an injection tube having a small diameter corresponding to a small entrance hole having a first cross-sectional diameter defined in the degenerated disc that is at least partially excavated to create a cavity having a maximum second cross-sectional diameter that is larger than the first diameter;

a porous container adapted for placement in the cavity;

a volume of tissue promoting material ~~sufficient to fill at least a portion of the cavity~~; and

an insertion device operably coupled to the injection tube that dispenses the volume of tissue promoting material into the ~~cavity~~ container~~in a piecemeal manner as a plurality of aliquots of the tissue promoting material.~~such that the volume of tissue promoting material fills the container sufficiently to promote tissue growth that mimics the mechanical characteristics of a natural disc.

2. (Currently Amended) A system for semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

an injection tube having a small diameter corresponding to a small entrance hole having a first cross-sectional diameter defined in the degenerated disc that is at least partially excavated to create a cavity having a maximum second cross-sectional diameter that is larger than the first diameter;

a porous container adapted for placement in the cavity;

a volume of tissue promoting material ~~sufficient to fill at least a portion of the cavity~~, wherein the tissue promoting material is selected from a group consisting of fibrous tissue promoting material, cartilaginous promoting material and any combination thereof; and

an insertion device operably coupled to the injection tube that dispenses the volume of tissue promoting material into the ~~cavity~~ container~~in a piecemeal manner as a plurality of aliquots of the tissue promoting material.~~such that the volume of tissue promoting material fills the container sufficiently to promote tissue growth that mimics the mechanical characteristics of a natural disc.

3. (Withdrawn) The nuclear replacement of claim 1 wherein the tissue promoting material is a preparation of multilayered bands piled in a circular configuration.

4. (Original) The nuclear replacement of claim 1 wherein the tissue promoting material is a preparation of tangled knots.

5. (Withdrawn) The nuclear replacement of claim 1 wherein the tissue promoting material is a preparation of multiple fabric bands.

6. (Withdrawn) The nuclear replacement of claim 1 wherein the tissue promoting material is combined with hydrogel.

7. (Withdrawn) The nuclear replacement of claim 1 wherein the tissue promoting material is surrounded by a porous container.

8. (Currently Amended) A system for semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

an injection tube having a small diameter corresponding to a small entrance hole having a first cross-sectional diameter defined in the degenerated disc that is at least partially excavated to create a cavity having a maximum second cross-sectional diameter that is larger than the first diameter;

a porous container adapted for placement in the cavity;

a volume of tissue promoting material ~~sufficient to fill at least a portion of the cavity~~, wherein the tissue promoting material is selected from a group consisting of: autograft, allograft, or xenograft of fascia, manmade polymeric fiber, talc, tissue promoting pharmaceuticals, tissue promoting minerals, tissue morphogenic protein, notochord cells and any combination thereof; and

an insertion device operably coupled to the injection tube that dispenses the volume of tissue promoting material into the ~~cavity~~ container ~~in a piecemeal manner as a plurality of aliquots of the tissue promoting material~~ such that the volume of tissue promoting material fills the container sufficiently to promote tissue growth that mimics the mechanical characteristics of a natural disc.

9-15. (Cancelled).

16. (Currently Amended) A system for semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

an injection tube having a small diameter corresponding to a small entrance hole defined in the degenerated disc that is at least partially excavated to create a cavity;

at least one strand of pliable tissue promoting material having an effective cross-sectional diameter less than the small diameter of the injection tube;

a porous container adapted for placement in the cavity;

~~the at least one strand of pliable tissue promoting material having a volume sufficient to fill at least a portion of the cavity~~; and

an insertion device operably coupled to the injection tube that dispenses a length of the pliable tissue promoting material ~~into the cavity such that the at least one strand is folded so as to fill at least a portion of the cavity~~into the container such that the volume of tissue promoting material fills the container sufficiently to promote tissue growth that mimics the mechanical characteristics of a natural disc.

17. (Original) The nuclear replacement of claim 1 wherein the tissue promoting material is selected from a group consisting of fibrous tissue promoting material, cartilaginous promoting material and any combination thereof.

18. (Withdrawn) The nuclear replacement of claim 16 wherein the tissue promoting material is a preparation of multilayered bands piled in a circular configuration.

19. (Original) The nuclear replacement of claim 16 wherein the tissue promoting material is a preparation of tangled knots.

20. (Withdrawn) The nuclear replacement of claim 16 wherein the tissue promoting material is a preparation of multiple fabric bands.

21. (Withdrawn) The nuclear replacement of claim 16 wherein the tissue promoting material is combined with hydrogel.

22. (Withdrawn) The nuclear replacement of claim 16 wherein the tissue promoting material is surrounded by a porous container.

23. (Original) The nuclear replacement of claim 16 wherein the tissue promoting material is selected from a group comprising: autograft, allograft, or xenograft of fascia, autograft, manmade polymeric fiber, talc, tissue promoting pharmaceuticals, tissue promoting minerals, tissue morphogenic protein, notochord cells and any combination thereof.

24. (Currently Amended) A method of constructing a semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

boring a small entrance hole having a first cross-sectional diameter into the degenerated disc;

creating a cavity having a maximum second cross-sectional diameter that is larger than the first diameter by reaming the degenerated disc and at least partially removing a degenerated disc nucleus via the small entrance hole;

inserting a porous container into the cavity; and

inserting a plurality of pieces of tissue promoting material into the ~~cavity~~ container to create the semi-biologic nuclear replacement for the degenerated disc by stimulating the tissue forming response in the mammalian body to the tissue promoting material.

25. (Original) The method of claim 24 wherein the tissue promoting material is selected from a group consisting of fibrous tissue promoting material, cartilaginous promoting material and any combination thereof.

26. (Original) The method of claim 24 wherein endplate cartilage is partially removed.

27. (Original) The method of claim 24 wherein endplate cartilage is retained.

28. (Original) The method of claim 24 wherein portions of an outer annulus are removed.

29. (Original) The method of claim 24 wherein portions of an outer annulus are retained.

30. (Original) The method of claim 24 wherein the tissue promoting material is selected from a group comprising: autograft, allograft, or xenograft of fascia, manmade polymeric fiber, talc, tissue promoting pharmaceuticals, tissue promoting minerals, tissue morphogenic protein, notochord cells and any combination thereof.

31. (Original) The method of claim 24 wherein the disc cavity surface is coated with a tissue promoting material.

32. (Withdrawn) The method of claim 24 wherein the tissue promoting material is combined with hydrogel.

33. (Original) The method of claim 24 further comprising: inserting a porous container into the disc cavity; said porous container adapted for tissue promoting material insertion therein.

34. (Withdrawn) A method of constructing a semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body comprising:

boring a small entrance hole into the degenerated disc;

creating a cavity by reaming the degenerated disc and at least partially removing a degenerated disc nucleus via the small entrance hole; and

inserting at least one strand of pliable tissue promoting material into the cavity such that a length of the at least one strand is folded within the cavity to create the semi-biologic nuclear replacement for the degenerated disc by stimulating the tissue forming response in the mammalian body to the tissue promoting material.

35. (Withdrawn) The method of claim 34 wherein the tissue promoting material is selected from a group consisting of fibrous tissue promoting material, cartilaginous promoting material and any combination thereof.

36. (Withdrawn) The method of claim 34 wherein endplate cartilage is partially removed.

37. (Withdrawn) The method of claim 34 wherein the endplate cartilage is retained.

38. (Withdrawn) The method of claim 34 wherein portions of an outer annulus are removed.

39. (Withdrawn) The method of claim 34 wherein an outer annulus is retained.

40. (Withdrawn) The method of claim 34 wherein the tissue promoting material is selected from a group consisting of: autograft, allograft, or xenograft of fascia lata, autograft, manmade polymeric fiber, talc, tissue promoting pharmaceuticals, tissue promoting minerals, tissue morphogenic protein, notochord cells, and any combination thereof.

41. (Withdrawn) The method of claim 34 wherein the disc cavity surface is coated with a tissue promoting material.

42. (Withdrawn) The method of claim 34 wherein the tissue promoting material is combined with hydrogel.

43. (Withdrawn) The method of claim 34 further comprising: inserting a porous container into the disc cavity; said porous container adpapted for tissue promoting material insertion therein.

44-52. (Cancelled).

53. (Currently Amended) A method of constructing a semi-biologic nuclear replacement for a degenerated disc of a spine of a mammalian body compriosing:

providing a porous container adapted for placement in the disc;

providing a plurality if pieces of strands of tissue promoting material; and

providing instructions for constructing a semi-biologic nuclear replacement of the degenerated disc, including:

boring a small entrance hole having a first cross-sectional diameter into the degenerated disc;

creating a cavity having a maximum second cross-sectional diameter that is larger than the first diameter by reaming the degenerated disc and at least partially removing a degenerated disc nucleus via the small entrance hole; [[and]]

inserting the container into the cavity; and

inserting a plurality of pieces of strands tissue promoting material into the ~~cavity~~ container to create the semi-biologic nuclear replacement for the degenerated disc by stimulating the tissue forming response in the mammalian body to the tissue promoting material.

54. (New) The system according to claim 1 wherein the injection tube dispenses the volume of tissue promoting material in a piecemeal manner as a plurality of aliquots of the tissue promoting material.